

Summary tables of most common data types for lakes/reservoirs (Table 1) and streams/rivers (Table 2), excerpted from draft 2016 *Wisconsin Consolidated Assessment & Listing Methodology* (WisCALM) guidance document.

Table 1. Minimum data requirements of conventional parameters for lakes and reservoirs.

<i>Parameter</i>	<i>Min. Sample Quantity/Frequency¹</i>	<i>Sampling Period (Season)</i>	<i>Sampling Protocol</i>
Chlorophyll <i>a</i>	3 monthly values from each of two years	July 15 - September 15	Surface grab or integrated samples from top 2 m
Total phosphorus	3 monthly values from each of two years	June 1 - September 15	Surface grab or integrated samples from top 2 m
Dissolved oxygen	10 values from separate calendar days	Ice-free period	Discrete epilimnetic measurements, except 2-story fishery lakes
Water temperature	20 values from separate calendar days	Year-round	Discrete epilimnetic measurements, except 2-story fishery lakes
pH	10 values from separate calendar days	Year-round	Discrete epilimnetic measurements, except 2-story fishery lakes
Toxic substances	2 values w/in a 3-yr period	Year-round	Surface grab or integrated samples from any depth

¹ Smaller datasets may be considered in certain cases, such as a high magnitude of exceedance.

Table 2. Minimum data requirements of conventional parameters for streams and rivers.

<i>Parameter</i>	<i>Min. Sample Quantity/Frequency²</i>	<i>Sampling Period (Season)</i>	<i>General Sampling Protocol</i>
Macroinvertebrates	2 samples (one sample from each of two years)	March – May or September – November	WDNR protocol, June 2000 (available on request)
Fish surveys	2 surveys (one survey from each of two years)	Generally, during base flow conditions	WDNR protocol, March 2001 (available on request)
Total phosphorus	6 values (one sample per month) ³	May - October	Surface grab sample
Dissolved oxygen	3 days of continuous measurements	July - August	Continuous measurements collected at a frequency of no less than once per hour
Water temperature	20 daily average values	May - October	Continuous measurements collected at a frequency of no less than once per hour
pH	10 values from separate calendar days	Year-round	Surface measurement
Toxic substances	2 samples w/in a 3-yr period	Year-round	Surface grab sample

² Smaller datasets may be considered in certain cases, such as a high magnitude of exceedance.

³ Two years of total phosphorus monitoring (six monthly samples per year) may be required for impairment listings in the absence of a corroborating bioassessment showing biological impairment or high magnitude of total phosphorus criteria exceedance.